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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

In the Matter of )

Administration of the North )  
American Numbering Plan )

CC Docket No. 92-237 /  
Phase II

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REPLY COMMENTS

Sprint Corporation ("Sprint"), on behalf of Sprint Communications Company LP and the United Telephone companies, hereby respectfully submits its Reply to comments filed December 28, 1992 in the above-captioned proceeding. As discussed briefly below, parties who oppose expansion of FG D carrier identification codes (CIC) to 4 digits fail to offer a viable alternative solution to code exhaust. Moreover, no party demonstrates why 10XXX and 101XXXX dialing cannot coexist.

There is no dispute that the current supply of 3-digit FG D CICs is almost depleted, and that to date, no viable technical alternatives to CIC expansion have been identified. These circumstances have led Sprint and a number of other parties<sup>1</sup> to conclude that expansion to 4-digit CICs is the only

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<sup>1</sup>See, e.g., Sprint, p. 12; Ameritech, p. 7; AT&T, p. 8; Bellcore, p. 9; BellSouth, p. 21; MCI, p. 33; Pacific, p. 8; Rochester, p. 3; SWB, p. 9; USTA, p. 12. Even those parties (e.g., Ad Hoc, NTCA, GTE, Bell Canada) which urge a more cautious approach--a greater reclamation effort, additional analysis of the relative costs and benefits of code expansion--recognize the ever-growing demand for codes.

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feasible means of meeting expected market demand. However, Sprint recognizes that expansion to 4-digit CIC may be costly and confusing to customers. Accordingly, Sprint recommended that 10XXX dialing be retained even after implementation of 4-digit CICs. The eighteen month "permissive dialing" period set by the North American Numbering Plan Administrator ("NANPA") is an arbitrary limitation whose reasonableness has not been demonstrated.<sup>2</sup>

There is substantial support for a much longer permissive dialing period than the eighteen months recommended by Bellcore. There is no technical need to replace 10XXX with 101XXXX (Sprint, p. 12), and, as AT&T points out (p. 8), "the requirement to educate customers about the new dialing arrangements...combined with the increased dialing time and increased likelihood of dialing errors, strongly suggests that 101XXXX dialing should be delayed for as long as possible." The LECs point out that flash-cut implementation of CIC expansion is not necessary (especially if there is insufficient demand for additional codes) and costly, and may be technically complex.<sup>3</sup>

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<sup>2</sup>Moreover, Bellcore, in its role as the NANPA, is incorrect in asserting that "most of the industry favored" an eighteen month transition period (Bellcore, p. 4, n. 4). Interexchange carriers present at the ICCF meetings at which this issue was discussed argued for a much longer permissive dialing period. See Affidavit of Ronald Havens, Sprint Director of Industry Relations, included hereto as Attachment 1.

<sup>3</sup>See, e.g., GTE, p. 21; SWB, p. 10; USTA, p. 12. Although GTE states that ambiguous CICs may present timing problems, ambiguous CICs should not be a problem since the LEC

(Footnote Continued)

If CIC expansion is staggered, it makes no sense (and is certainly confusing to customers) to impose an eighteen month transition deadline. Under these circumstances, the Commission should not sanction implementation of an arbitrary limitation on the permissive dialing period.

Only a few parties allege that expansion of FG D CICs to four digits is not necessary.<sup>4</sup> These parties argue that such expansion is costly, and suggest that aggressive conservation and reclamation programs will be sufficient to address the problem of code exhaust.

This suggestion is unrealistic. As Ameritech points out (p. 15), "accelerating demand for numbers...is the primary driver behind the need for...CIC expansion. As long as the industry will respond to customer and carrier demands for numbers, there will be a need to expand the existing supply of codes, regardless of the conservation and reclamation efforts." And, there can be no doubt that demand for NANP resources will continue to increase. Service providers (local exchange, interexchange, cellular, information, and personal communications, from both the U.S. and Canada) all make clear that they

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(Footnote Continued)

should be able to determine, based on the leading digit of the XXX(X) portion of the code, whether the code is a three or four-digit CIC.

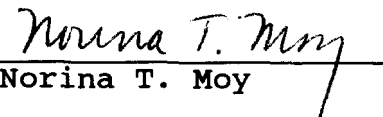
<sup>4</sup>See, e.g., Intellicall, p. 1; Unitel, p. 5.


expect to need more codes in the relatively near future and that demand will far exceed currently available supply.<sup>5</sup>

Expansion of CICs to four digits is the only technical solution to the problem of code exhaust, and industry efforts to implement CIC expansion--including a permissive dialing period longer than eighteen months--should be allowed to proceed.

Respectfully submitted,

SPRINT CORPORATION

  
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Its Analyst

Its Attorneys

January 27, 1993

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<sup>5</sup>Moreover, it is not clear how many codes can be retrieved from even a very aggressive reclamation program. For example, some IXC's need additional CICs for basic access because of limitations in some of the LECs' networks, such as the inability of the LEC network to handle an IXC's 800 traffic on segregated trunk groups.

**ATTACHMENT 1**

AFFIDAVIT OF RONALD D. HAVENS

STATE OF MISSOURI     )  
                              )  
COUNTY OF JACKSON    )     ss:

RONALD D. HAVENS, being duly sworn, deposes and says:

1.     I am a Director of Industry Relations in the External Affairs department of Sprint Communications Company, L.P. I have held this position since October, 1987. I have been employed by Sprint and its predecessor companies (Southern Pacific Communications and GTE Sprint) for 17 years. As part of my current responsibilities, I regularly attend industry forum meetings such as the Industry Carriers Compatibility Forum ("ICCF") referenced in footnote 4 of the comments filed by Bellcore on December 28, 1992, in CC Docket No. 92-237 (Administration of the North American Numbering Plan).

2.     In its comments in CC Docket No. 92-237 (footnote 4), Bellcore discusses industry efforts to reach consensus on the issue of a permissive dialing period following the introduction of expanded Feature Group D dialing arrangements using expanded carrier identification codes ("CICs"). Bellcore asserts that:

The plan for CIC expansion was debated in the Industry Carriers Compatibility Forum and consensus was reached to expand from the current 10XXX dialing (using three digit CICs) to 101XXXX (using four digit CICs), an approach that would initially accommodate transitional use of current 10XXX codes and once the transition had ended would accommodate future expansion to five digit CICs. Most of the industry favored such a transition, after which all calls dialed using a carrier access code would utilize 101XXXX dialing, but some carriers with today's three digit CICs argued that assignees of these CICs should be permitted to retain the 10XXX dialing arrangement indefinitely, or through a very long (10 year) "transition" period. NANPA opted for an eighteen month permissive transitional period. . . .

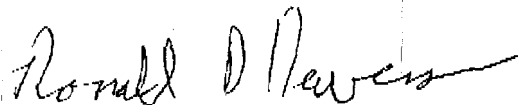
3.     I attended the April 3-4, 1989 CIC expansion workshop meeting and the July 12-13, 1989 ICCF meetings at which the issue of CIC expansion and permissive dialing period was discussed. Since those meetings, I have also been active in efforts conducted to reach

consensus on the transition issue.

4. Positions taken by workshop and ICCF participants have been divided along LEC and IXC interest group lines. The IXCs present favored a transition lasting much longer than the eighteen months recommended by Bellcore, while the Bellcore Client Companies ("BCCs") supported Bellcore's position. The division regarding the transition period can be seen by reviewing the minutes of the April 3-4, 1989 meeting (copy attached).

5. Given the split between LECs and IXCs regarding an appropriate permissive dialing period, Bellcore's characterization that "most of the industry favored such a transition" is grossly inaccurate. Since the BCCs are the only parties which supported Bellcore's proposed transition plan, there is obviously a large segment of the telecommunications industry which objected (and continues to object) to such plan.

6. Sprint, along with much of the industry, continues to support a transition period longer than eighteen months, and use of both 10XXX and 101XXXX dialing for the foreseeable future.

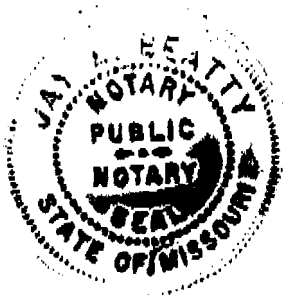


Ronald D. Havens

Sworn and subscribed to  
before me this 27 day of  
January 1993

  
Notary Public

JAY B. BEATTY  
Notary Public - State of Missouri  
Commissioned in Jackson County  
My Commission Expires 10-22-95



APR 24 1989

April 18, 1989

To: Attendees at FGD Carrier Access Code (CAC) Workshop

At the request of participants at ICCF#16, held on March 1-2, 1989, a workshop was scheduled to clarify and discuss Carrier Identification Code (CIC) expansion issues, to review the Carrier Access Code (CAC) Transition Plan for Feature Group D as presented by the North American Numbering Plan (NANP) Administrator at ICCF, and to reach consensus with regard to the ultimate choice for the FGD CAC.

The workshop, held on April 3-4, 1989 in St. Louis, Missouri, was hosted by Southwestern Bell Telephone Company. In addition to the detailed explanation of the Transition Plan as developed by the NANP Administrator, a different proposal was presented by MCI with regard to FGD CAC. After reviewing the two plans and identifying the underlying differences, a compromise was proposed by the NANP Administrator at the workshop. Basic agreement among the attendees appears to have been reached on the following points:

- 1) Plan for ultimate five digit CIC for FGD in the format 10XXXXX.
- 2) Length of time for permissive use of both the current (10XXX) and (101XXXX) future formats is to be evaluated by each company and a written response sent to Bellcore.

The following action item requires your attention and written response to me **no later than June 1, 1989**. Given that for FG D:

- Deployment of network capability to support FGD CAC 101XXXX will have been completed by 4Q93;
- Series 10X, 15X and 16X will be prohibited from assignment in the three digit CIC format to prevent future ambiguity;
- Existing three digit CICs (XXX) will coexist with and become four digit CICs (OXXX);
- New assignments will proceed with 5XXX and 6XXX

How long a period of time or until what threshold level (percentage of assignments in the 5XXX and 6XXX series) do you recommend permissive use of 10XXX and 1010XXX be continued, prior to the elimination of 10XXX thus permitting full deployment of 101XXXXX and eventual deployment of 10XXXXXX?



Attendees at FGD CAC Workshop - 2

April 18, 1989

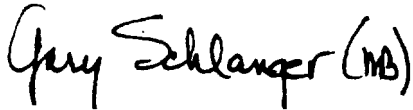
A summary of your responses will be presented at ICCF #17, July 12-13, 1989.

The following attachments relate to the workshop:

- Attachment I: Meeting Notes
- Attachment II: List of Attendees
- Attachment III: Viewgraphs presented by Bellcore as NANP Administrator
- Attachment IV: MCI Proposal
- Attachment V: NANP Summary and Compromise Proposal as presented during workshop
- Attachment VI: Revised timeline of original NANP proposal based on suggested changes in wording during workshop

Should you have any questions regarding Carrier Identification Codes, please call Madeline Bogdan at 201-740-4593.

Sincerely,



G. Gary Schlanger

Att.

Copy to  
ICCF Participants

FG D CAC WORKSHOP  
April 3-4, 1989  
St. Louis MO

MEETING NOTES

Gary Schlanger, Bellcore, as NANP Administrator, opened the Workshop by reviewing the agenda and outlining the goals of the workshop. After thanking Southwestern Bell Telephone Company for hosting the meeting, he turned the presentation over to Madeline Bogdan of the NANP staff. (VGs 2-3)

The current status of CIC assignments and rate of growth were reviewed. It was noted that the industry had been notified that the 700 level of assignment had been reached and conservation methods had been initiated as per the CIC guidelines. (VGs 4-6)

Consensus reached by industry participants at ICCF#15 with regard to CIC extensions was reviewed as background information for the FG D CAC transition plan and ultimate FG D CAC proposal. Bellcore investigations of potential alternatives for FG D CAC were presented along with the rationale for the NANP plan. (VGs 7-12)

The NANP transition plan was discussed in depth as a further extension of what had been originally presented at ICCF#15. (VGs 13-14). The timeline prepared with regard to CIC extensions was presented and subdivided into three major categories:

- critical CIC exhaust dates
- FG B CAC development and deployment
- FG D CAC development and deployment (VG 15)

Several suggestions were made to help clarify the definition of the timeline phraseology. A revised time line incorporating suggested wording changes has been developed. (Attachment VI)

To clarify any misconceptions regarding present and future dialing patterns, an example of a fictitious CIC assignment and the associated CACs was presented for present and future FG B and FG D access service. (VG 16)

Ken Eckel, MCI, presented a paper and discussed MCI's CIC Expansion Proposal. He stated that MCI's position was driven by concern over the impact on customers and explained that their proposal was similar to the NANP transition plan but included grandfathering of currently assigned 3 digit CICs. He went on to say that MCI would not agree to a change of format for existing assignments and supported disparity in dialing with future entities. He suggested that 1XX assignment of the 3 digit CIC format be investigated to determine whether any could be reclaimed, thus permitting the use of another decade in the expanded format. He also stated that Allnet and TELUS support MCI's proposal. (Attachment III)

Frank Ferrantelli, NYNEX Service Co., stated that retention of the 5 digit access code along with the 7 digit access code would appear to conflict with the intent of equal access and he could not support dialing disparity. Bob Hirsh, AT&T, stated that he felt that the permissive period (4Q93-2Q94) as proposed by the NANP administrator was too short but he felt that dialing disparity may not be permitted indefinitely. He suggested clarification may be needed from the Department of Justice.

The NANP proposed alternatives for the ultimate FG D CAC were reviewed along with the ramifications of each choice. (VGs 17-18)

Gary Schlanger noted the points to be considered and gave a summary of both the plan developed by the NANP administrator and the MCI proposal. He then suggested a compromise proposal for consideration. (Attachment IV)

Considerable discussion followed this presentation and centered upon the difference perceived between the plans, i.e., 5 digit vs 4 digit CIC; retention of 5 digit CAC for existing entities vs 7 digit CAC for new assignments; unspecified ultimate CAC vs definitive choice of CACs; unknown future use of 1010XXX vs planned change of existing 10XXX to 1010XXX, and length of time for permissive retention of 10XXX.

Suggestion was made that the NANP administrator review the dialing disparity issue with the FCC and with the court. Gary Schlanger stated he would investigate feasibility. He requested that each participant at the workshop review the question of retaining the 10XXX format in coexistence with 1010XXX and the length of time or threshold level at which point 10XXX would be eliminated, thus gaining full number range usage of 101XXXX. Each company's position on this topic was requested in writing. He stated that apparent agreement was reached with regard to 10XXXXX as the choice for the ultimate FG D CAC.

He noted that NANP contributions on CIC extensions have been presented to T1S1.4, T1S1.3 and T1S1.2 and contributions will continue to be included in forthcoming T1 meetings.

Laurie Donahue, AT&T, requested information from the ECs concerning the maximum quantity of CICs handled by specific central office switches at the current time. Suggestion was made that this information be provided by ECs during EC reports at ICCF. Gary Fleming, ICCF Moderator, stated that the agenda setting conference call prior to ICCF#17 could be used to discuss the feasibility of including the information requested. Agreement was reached regarding this suggestion.

Gary Schlanger thanked the attendees for their participation and both Madeline Bogdan and Ken Eckel for their presentations.

## CIC WORKSHOP

Omni International Hotel,  
St. Louis, MO

April 3-4, 1989

<u>Name</u>	<u>Company</u>	<u>Telephone No.</u>
Harold Amundson	Contel	404-551-4923
Madeline Bogdan	Bellcore	201-740-4593
Margaret Bumgarner	US WEST	206-345-2067
Frank Czirmay	ITI	214-653-1204
Laurie Donahue	AT&T	312-510-6913
Ken Eckel	MCI	703-734-2262
Norman Epstein	GTE	203-965-3954
Gary Fleming	Bellcore	201-740-4612
Frank Ferrantelli	NYNEX	914-683-2021
Thomas Gajeski	USTA	202-835-3183
John Gurzick	NTN	301-948-5000
Ron Havens	US Sprint	816-276-6881
Bob Hirsch	AT&T	201-234-4197
Timothy Howard	Southern Interexchange	205-586-1301
Gary Juhl	Southwestern Bell Tel.	314-235-1524
S. Karthikeyan	GTE	214-717-7212
Joe Koron	AT&T	312-510-7303
Bill Krall	Bellcore	201-699-4494
Connie Lane	US WEST	303-965-3031
Jim Leamon	Metromedia	512-270-2000 x2656
John Manning	Bell Atlantic	703-814-8160
Douglas McCullough	BellSouth	205-985-8251
James C. Moon	BellSouth	205-321-6327
Michael Petrey	GTE	214-453-3589
Jackie Richardson	Southwestern Bell Tel.	314-235-9220
Howard Robins	SNET	201-553-2558
Bill Ruhl	Bell Atlantic	703-974-3500
Gary Schlanger	Bellcore	201-740-4616
David Serra	Southwestern Bell Tel.	314-235-9230
William Sever	GTE	214-718-6851
Bruce Stevenson	NTI	201-631-8720
Raymond Strait	GTE	214-718-6851
Larry Young	Ameritech	312-330-6130

FEATURE GROUP D  
CARRIER ACCESS CODE WORKSHOP

ST. LOUIS, MISSOURI

APRIL 3-4, 1989

MADELINE BOGDAN  
NANP ADMINISTRATION  
BELLCORE  
201-740-4593

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**CIC WORKSHOP**

**AGENDA**

**OMNI INTERNATIONAL HOTEL  
ONE ST. LOUIS STATION  
ST. LOUIS, MO  
(314) 241-6664**

**APRIL 3, 1989  
AFTERNOON ONLY**

<b>1:00 - 1:15</b>	<b>INTRODUCTION</b>	<b>GARY SCHLANGER BELLCORE</b>
<b>1:15 - 1:45</b>	<b>REVIEW OF CIC EXTENSION ACTIVITIES</b>	<b>MADELINE BOGDAN BELLCORE</b>
<b>1:45 - 2:45</b>	<b>CAC TRANSITION PLAN FG D</b>	<b>MADELINE BOGDAN</b>
<b>2:45 - 3:00</b>	<b>BREAK</b>	
<b>3:15 - 4:45</b>	<b>OPEN DISCUSSION</b>	
<b>4:45 - 5:00</b>	<b>REVIEW</b>	<b>GARY SCHLANGER</b>

**APRIL 4, 1989  
MORNING ONLY**

<b>7:30 - 8:00</b>	<b>CONTINENTAL BREAKFAST</b>	
<b>8:00 - 8:30</b>	<b>101XXXX, 10XXXXX, 10XXXX ALTERNATIVES</b>	<b>MADELINE BOGDAN</b>
<b>8:30 - 11:00</b>	<b>OPEN DISCUSSION</b>	
<b>11:00 - 11:15</b>	<b>SUMMARY</b>	<b>GARY SCHLANGER</b>

## WORKSHOP GOALS

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- CLARIFY AND DISCUSS CIC EXPANSION ISSUES
- REVIEW CARRIER ACCESS CODE (CAC) TRANSITION PLAN FOR FG D
- REACH CONSENSUS ON ULTIMATE CAC FOR FG D (101XXXX OR 10XXXXX OR 10XXXX)



## CURRENT STATUS OF CIC ASSIGNMENTS

AS OF MARCH 31, 1989

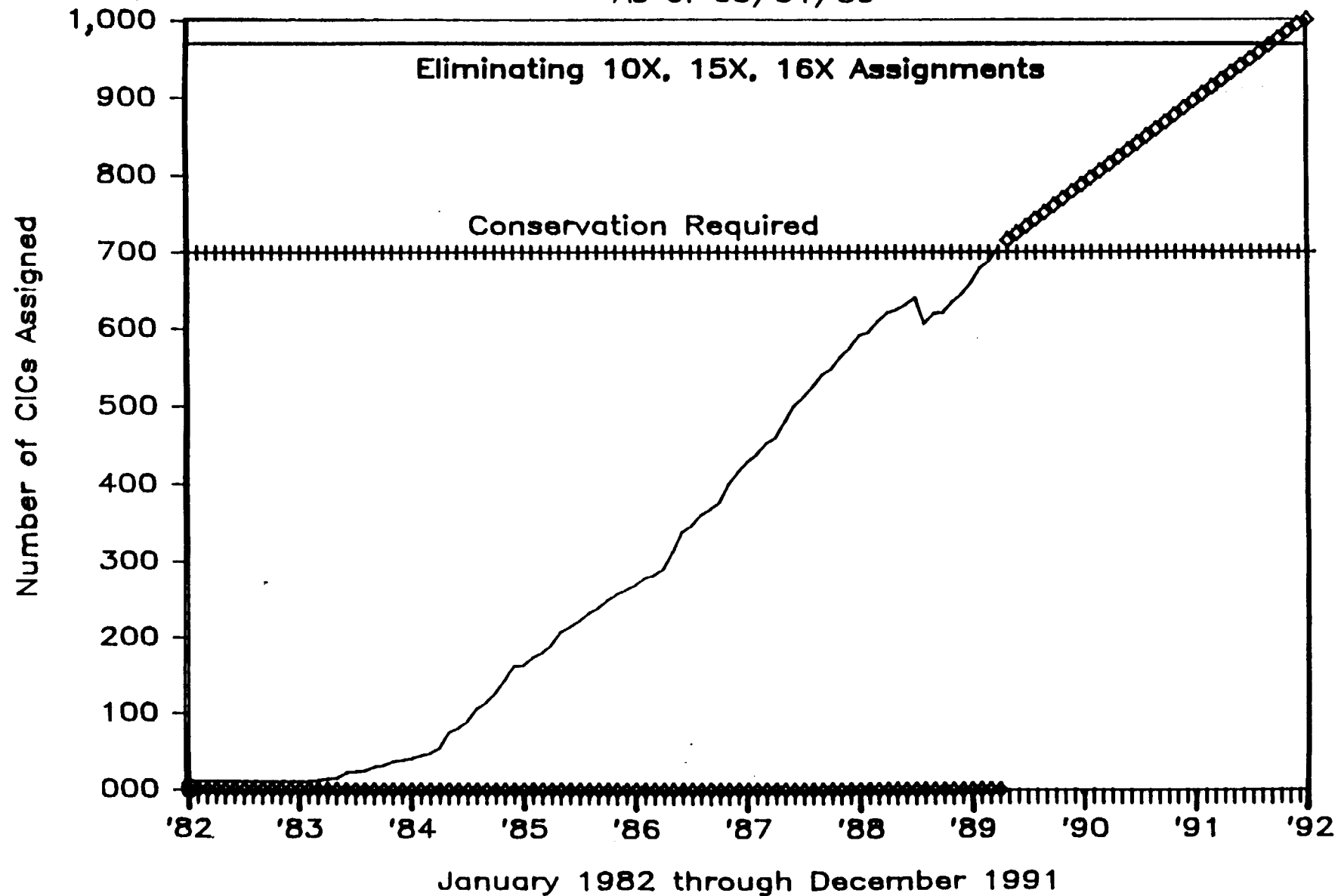
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● TOTAL CICs ASSIGNED = 706

- 685 DOMESTIC FG B AND/OR D
- 16 INTERNATIONAL
- 3 CORRIDOR
- 1 NETS (GOVERNMENT EMERGENCY)
- 1 TANDEM ACCESS

# RATE OF CIC GROWTH

As of 03/31/89



## CIC CONSERVATION LEVEL

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### 700 LEVEL OF ASSIGNMENTS

- REACHED ON MARCH 17, 1989
- NOTIFICATION DATED MARCH 20, 1989 SENT TO
  - ICCF PARTICIPANTS
  - CIC DISTRIBUTION LIST
- NO ADDITIONAL SUPPLEMENTAL CODES WILL BE ASSIGNED
- TRANSITION PERIOD BEGINS FOR MERGED ENTITIES

CONSENSUS OF INDUSTRY PARTICIPANTS  
AT ICCF#15

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- SPLIT ASSIGNMENTS FOR FGs B AND D CREATING BCICs AND DCICs

- EXPAND BCIC TO FOUR DIGITS - XXXX

CAC: 950-XXXX

- PLAN FOR 4 DIGIT DCIC-XXXX

TRANSITION PLAN: TO BE DETERMINED

CAC: TO BE DETERMINED

## FG D CARRIER ACCESS CODE INVESTIGATIONS

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- CURRENT PREFIX WITH 4 DIGIT DCIC
- NEW TWO DIGIT PREFIX WITH 4 DIGIT DCIC
- SPECIAL CHARACTERS \* OR #
- THREE DIGIT PREFIX WITH 4 DIGIT DCIC

## FG D CARRIER ACCESS CODE INVESTIGATIONS (CONT'D)

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UTILIZE CURRENT PREFIX WITH 4 DIGIT DCIC

10XXX -----> 10XXXX

- WOULD REQUIRE FLASH CUT NATIONWIDE
- NO PERMISSIVE PERIOD

10XXX -----> 101XXX ----> 10XXXX

- WOULD REQUIRE TRANSFER OF ALL EXISTING 1XX ASSIGNMENTS
- ELIMINATION OF 1XX SERIES FROM AVAILABILITY FOR ASSIGNMENT THUS PRECIPITATING EXHAUST ~ 1 YEAR (4Q90)

## FG D CARRIER ACCESS CODE INVESTIGATIONS (CONT'D)

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UTILIZE NEW TWO DIGIT PREFIX WITH 4 DIGIT DCIC

- LIMITED TO: 00 01 11

00 - IC OPERATOR ASSISTANCE

01 - CUSTOMER - DIALED OPERATOR SERVICED INTERNATIONAL  
CALLS

11 - ACCESS CODE FOR CUSTOM CALLING SERVICES DIAL  
PULSE EQUIVALENT OF \*

- ALL OTHER COMBINATIONS OF DIGITS WOULD CONFLICT WITH START  
OF NPA, NNX, 0+ OR 1+ DIALING PATTERN

## FG D CARRIER ACCESS CODE INVESTIGATIONS (CONT'D)

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### UTILIZE SPECIAL CHARACTERS \* OR #

- NON-STANDARD USE OF SPECIAL CHARACTERS
  - \* IS A PREFIX FOR CUSTOM CALLING SERVICES (\*XX). FUTURE PLANNED USE IS TO PROVIDE ERROR CORRECTION IN SEQUENTIAL DIALING TO ALLOW REDIALING THE ERROR SEGMENT.
  - # INDICATES END OF DIALING (E.G., 1DDD) OR CONCLUDE PRESENT ACTION AND PROCEED TO NEW ACTION (E.G., SEQUENCE CALLING FOR CALLING CARD). IS ALSO USED AS FIRST CHARACTER TO INDICATE WIDEBAND OR OTHER DATA CALL REQUIRING SPECIAL TREATMENT.
- DISPARITY OF DIALING FOR TOUCHTONE/ROTARY CUSTOMERS
- \*, # CANNOT BE INCORPORATED IN SIGNALING. WOULD REQUIRE CONVERSION TO DIGITS AND DEVELOPMENT OF TRANSLATION TABLES



## FG D CARRIER ACCESS CODE INVESTIGATIONS (CONT'D)

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### UTILIZE THREE DIGIT PREFIX WITH 4 DIGIT DCIC

- N11 CODE CURRENTLY UNASSIGNED E.G., 311
  - UTILIZES ONE OF FOUR REMAINING N11 CODES THUS FURTHER DEPLETING A LIMITED DIALABLE NUMBERING RESOURCE
  - LIMITS THE DCIC TO 4 DIGITS WITH A THREE DIGIT PREFIX
  - N11 CODE COULD POTENTIALLY BE REQUIRED IN FUTURE AS ADDITIONAL CARRIER ACCESS CODE FOR FG B: 311-XXXX
  
- 101 PREFIX WITH FOUR DIGIT DCIC
  - WOULD ALLOW ORDERLY TRANSITION FROM PRESENT 10XXX
  - WOULD PERMIT EXPANSION TO FIVE DIGIT DCIC IF REQUIRED BY INDUSTRY